

In the *Division of Illustrations*, under Mr. DeL. W. Gill, 105 original drawings were made during the month, comprising geologic landscapes, maps and sections and miscellaneous subjects. Engraved proofs to the number of 117 were received and examined. In the photograph laboratory 203 negatives and 1165 prints were made.

THE BIOLOGICAL EXPERIMENT STATION OF
THE UNIVERSITY OF ILLINOIS.

THE State Legislature of Illinois has made a sufficient appropriation to the Biological Experiment Station of the University of that State to provide for it an independent equipment and a separate working force.

This Station was established April 7, 1894, in leased quarters on the Illinois River, at the town of Havana, one hundred miles west of the University. It is devoted to a continuous study of the plant and animal life of the Illinois River and adjacent waters, with principal reference to ecological problems. Its main object is scientific, and the principal business of its staff is original research. Economic ends will be kept in view, and educational applications of the results of its work will be carefully regarded in the preparation of its reports.

The Station is jointly maintained by the University of Illinois and the Illinois State Laboratory of Natural History, each contributing equally to its support. It is under the general management of Professor S. A. Forbes, director of the State Laboratory and professor of zoölogy in the University. Its newly appointed superintendent is Dr. Charles A. Kofoid, its zoölogical assistant is Mr. Adolph Hempel, and its botanical assistant is Mr. B. M. Duggar.

It will be provided with a floating laboratory, 48 x 15 feet, furnished with tables, microscopes and aquatic and other apparatus of observation and experiment sufficient for twenty workman; with rooms on shore for

microscope technology and similar work; and with a naphtha launch and several skiffs as means of transportation. Its quarters will be occupied continuously throughout the year by its resident force, and will be open to advanced students of aquatic biology during the vacation season of 1896, on terms to be hereafter stated.

Papers are now finished or far advanced setting forth the results of last year's work on rotifers and Protozoa, on oligochaete worms, on Daphniidæ, on insects aquatic in any stage, and on the chemical characters of the waters of the various field stations, as shown by periodical analyses. These papers will be printed separately in the Bulletin of the State Laboratory, and will also be published conjointly, at intervals, together with general discussions and other comprehensive matter, in the biennial reports of the Station.

ALEUT BAIDARKAS IN KAMCHATKA.

THERE is a statement in Dr. Guillemard's interesting account of the 'Cruise of the Marchesa' (vol. i., pp. 224-227) which, if left uncontradicted, might lead to erroneous conclusions in the discussion now going on as to the relationship and origin of the North American natives.

The 'Marchesa,' in September, 1882, visited a point on the western coast of Kamchatka not far from Cape Lopatka, and there* fell in with a party of 'natives' who came out to the steamer in canoes 'built somewhat on the model of a Greenlander's *Kayack*.' One of these canoes was purchased, and on p. 228 is a figure of the '*Bow of Kurile Canoe*,' presumably the one

*The island protecting the bay 'which is not marked in the chart was named by us after Lieut. R. H. Powell.' Guillem. Cr. Nr., i., p. 225 (1886). It is, however, in the Russian Admiralty charts (for instance No. 1475, corrected to 1880) and is called Tehtashut Isl. The native huts are situated back of Zheltij Mys, which is situated east of the Kurilskoje Lake and the Iljina Volcano (Itterna, Guillemard?).

bought. The Marchesa party also obtained a sea-otter bow and arrow, a figure of the latter being given on p. 225.

On p. 229 Dr. Guillemard says as follows : "We could make out nothing about the nationality of the people of this village. We had been told that some Aleuts from the Bering group had settled in this neighborhood, but it seems that the Kurile islanders have also passed northward, and established themselves on the coast near Cape Lopatka. To us it appeared that they did not differ appreciably from the Kamchatdale type, but the opinion of a mere passer-by on these matters is usually valueless."

Notwithstanding the caution with which Dr. Guillemard has expressed himself, the impression which his account leaves is that the people he met were Kuriles and that the skin-canoe is a Kurile apparatus.

The fact is that these natives were Aleuts pure and simple, former inhabitants of the Aleutian Islands (not even by way of Bering Island, I believe). The history of their location near Cape Lopatka, in Kamchatka, and the consequent appearance of the baidarka, or skin-canoe, on that peninsula is as follows :

The Russian authorities, in order to prosecute the sea-otter hunt in the Kurile Islands at the time when these still belonged to the Russian crown, transferred a number of noted Aleutian sea-otter hunters, with their families, to the Kuriles. At the time of the cession of these islands to Japan it was stipulated that such of the inhabitants as preferred to return to their homes should be allowed to do so. The Aleutian Islands having in the meantime been ceded to the United States, and the Aleuts living in the Kuriles having declared their desire of remaining Russian subjects, they were transferred to Kamchatka at the expense of the Russian government and provisionally located a few miles from Petropaulovski, on

the road between this port and Aratcha. Here they lived for several years in extreme poverty and squalor, and, as there was no way of employing them, the government had to feed them to prevent them from starving to death. The ease with which they could obtain *rooka* at Petropaulovski tended to further degrade them and render their total extinction a question of time only, if allowed to continue living in that neighborhood. It having been decided by the authorities to change their habitation, the present site of their village near Cape Lopatka was selected, as it offered a fair prospect of making them self-supporting by hunting and fishing.

These were the natives which Dr. Guillemard and his party met, and thus it came to pass that skin canoes were in use in the Kuriles and in southern Kamchatka.

The illustration of the three-hole baidarka given by Dr. Guillemard on page 226, and the description of a sea-otter bow and arrow, the latter with figure, on page 225, serve as additional proof of the correctness of the above. They are in every detail identical with specimens in the National Museum from Alaska.

LEONHARD STEJNEGER.

U. S. NATIONAL MUSEUM.

THE HISTORY OF NAVIGATION IN SPAIN.

ALTHOUGH Navarrete's *Historia de la Nautica*, published at Madrid in 1846, is now almost half a century old, very little use has been made of it in recent biographies of Columbus. In order to thoroughly understand the greatness of the discovery made by the Genoese navigator, it is essential to be acquainted with the progress of naval science up to his time, and that is what is described in the Spanish scholar's book. He begins by giving a short sketch of seaman'ship among the Ancients. As a great deal has been done to elucidate the subject